

REMARKS/ARGUMENTS

Reconsideration of the application is requested.

Claims 1-12 remain in the application. Claims 1-2 and 11 have been amended.

In the section entitled "Claim Rejections - 35 USC § 103" on pages 2-4 of the above-mentioned Office action, claims 1-12 have been rejected as being unpatentable over Kragl (US 6,832,861 B2) under 35 U.S.C. § 103(a).

The rejection has been noted and claims 1-2 and 11 have been amended in an effort to even more clearly define the invention of the instant application. Support for the changes is found in Figs. 1 and 2 as well as the corresponding description in the specification.

Before discussing the prior art in detail, it is believed that a brief review of the invention as claimed, would be helpful.

Claims 1 and 2 call for, inter alia:

a reflector disposed in said housing, said reflector having a base rim in an immediate vicinity of said luminous surface and a reflecting surface for focusing the light onto at least one of said coupling region of said luminous surface of said housing and the light receiving surface of the optical conductor;

a luminous chip formed of photoelectric material disposed in said reflector, said photoelectric material generating the light; and

electric terminals for supplying power and disposed in said housing, one of said terminals being formed on a side opposite from said reflector and the other of said terminals being connected to said reflector by a bond wire running through a gap formed between said base rim and said luminous surface.

Claim 11 calls for, inter alia:

a base having electric terminals, one of said electric terminals being configured in an illuminating direction as a reflector having a reflecting surface and a base rim bounding said reflecting surface;

a luminous chip formed of photoelectric material disposed in said reflector and connected to the other of said electric terminals via a bond wire; and

an optically conducting body functioning as a housing connected to said base, said housing having a luminous surface and surrounding said photoelectric material, said luminous surface having a coupling region constructed at a smallest possible distance from said base rim;

said bond wire running through a gap formed between said base rim and said luminous surface.

According to the invention of the instant application, an optical light element (2) contains a light-guiding body functioning as a housing (11) having a luminous surface (12), a reflector (4) disposed in the housing, a luminous chip (8) formed of photoelectric material and disposed in the reflector (4), and electric terminals (7, 9) for supplying power and disposed in the housing. The reflector (4) has a base rim (14) in an immediate vicinity of the luminous surface (12) and a reflecting surface (16) for focusing the light onto a

coupling region of the luminous surface or a light-receiving surface (13) of an optical conductor (3). One of the terminals (7) is formed on a side opposite from the reflector (4) and the other of the terminals (9) is connected to the reflector (4) by a bond wire (10) running through a gap formed between the base rim (14) and the luminous surface (12).

The object of the invention of the instant application is completely different from that of Kragl. The object of the invention of the instant application is to provide an inexpensive connection between a light-emitting diode (2), especially its light-emitting element, and an optical conductor (3). This connection should also be easy to construct. In contrast, the object of Kragl is to produce a safe connection of an optical waveguide 7 on a support 1, wherein a light-emitting semiconductor element 2 and the further connection elements are fixedly (or permanently) disposed on the support.

In the invention of the instant application, only the light-emitting element (8) with its terminals (7, 9) is housed in a housing (11). In contrast, in Kragl the light-emitting semiconductor 2 and the optical waveguide 7 are cast fixedly into a transparent adhesive. As a result, the optical conductor and the support are connected with each other permanently. Electric terminals are not at all provided in

Kragl. The bond wire 5 and the semiconductor element 2 are disposed on the conductor surface of the support and correspondingly connected.

Further, in the invention of the instant application there is a distance between the optical conductor (3) and the light-emitting element (8), namely the reflector (4) is not led to the optical conductor. Therefore, there exists a slit region (within the housing) between the light-emitting element (8) and the surface (12) of the housing, on which the semiconductor element is disposed. The bond wire (10) is guided in this slit region from the reflector opening to the corresponding electric terminal (9). It is therefore achieved that the reflector surface is formed free of interruptions, gaps, or an opening for the bond wire. This guarantees a higher efficiency of light transmission in the optical conductor because the light can be completely focused in the optical conductor.

Claims 1-2 and 11 are, therefore, believed to be patentable over the art and since all of the dependent claims are ultimately dependent on claims 2 or 11, they are believed to be patentable as well.

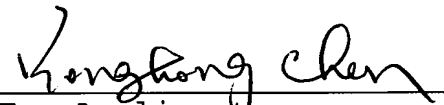
In view of the foregoing, reconsideration and allowance of claims 1-12 are solicited.

In the event the Examiner should still find any of the claims to be unpatentable, counsel would appreciate a telephone call so that, if possible, patentable language can be worked out.

Petition for extension is herewith made. The extension fee for response within a period of one month pursuant to Section 1.136(a) in the amount of \$120.00 in accordance with Section 1.17 is enclosed herewith.

Please charge any other fees which might be due with respect to 37 CFR Sections 1.16 and 1.17 to the Deposit Account of Lerner and Greenberg, P.A., No. 12-1099.

Respectfully submitted,


For Applicant

Yonghong Chen
Reg. No. 56,150

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Lerner and Greenberg, P.A.
Post Office Box 2480
Hollywood, FL 33022-2480
Tel: (954) 925-1100
Fax: (954) 925-1101